

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/025,169  
Filed: December 18, 2001  
Inventors:  
Kuldipsingh Pabla


Examiner: Hu, Jinsong  
Group/Art Unit: 2154  
Atty. Dkt. No: 5181-90001

Title: Peer Group Name Server

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Robert C. Kowert

Name of Registered Representative

  
Signature

August 17, 2006

Date

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**Mail Stop AF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicants request review of the rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reasons stated below.

Claims 1-70 remain pending in the application. Reconsideration of the present case is earnestly requested in light of the following remarks. Please note that for brevity, only the primary arguments directed to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal.

The Examiner rejected claims 1-14, 17 and 19-70 under 35 U.S.C. § 102(e) as being anticipated by Borella et al. (U.S. Patent 6,269,099) (hereinafter "Borella"). Applicant respectfully traverses this rejection for at least the reasons below.

Regarding claim 1, Borella fails to disclose a peer group name server receiving information about a peer group, wherein the peer group comprises one or more peers as member peers of the peer group, wherein the one or more peers reside on one or more network nodes coupled to the network and wherein the information about the peer group stored on the peer group name server is accessible to entities on the network through the peer group name server to discover the peer group. The Examiner cites column 2, line 64 - column 3, line 4. However, Borella does not teach anything regarding a peer group name server. The Examiner refers to item 12 in FIG. 1 of Borella as a peer group name server. However, the Examiner's interpretation of Borella is clearly incorrect. First of all, item 12 in Borella's FIG. 1 is a network and is clearly described as such by Borella (Borella, column 4, lines 48-53. Borella states that network system 10 "includes a first network 12 with multiple network devices." A network, as taught by Borella cannot be considered a peer group name server.

Borella teaches that a network device, such as Borella's edge router 16 may insert a special peer discovery marker in the header of an otherwise normal network message. Another network device, such as Borella's edge router 20 retrieves the marker from the network message before sending the network message on to its destination. The information in Borella's peer discovery marker includes address information identifying the network device that inserted the discovery marker in the network message. The receiving network device then opens a separate communication with the sending network device in order to send its own address information. Thus, the two network devices can communicate separately, such as to enable the two devices to "exchange and negotiate 'intelligent' edge router capabilities such as error correction, encryption, compression and other transmission parameters" (Borella, column 7, line 36-column 8, line 12 and column 10, lines 25-33).

The Examiner also refers to Borella's network device being able to discover its peer by using a peer discovery protocol, citing figures 8A-B and column 7, line 37 – column 8, line 12. Borella teaches a system and method for peer network device discovery but Borella fails to disclose that the information (i.e. the marker information) sent from one peer to another is accessible to entities on the network *through the peer group name server* to discover the peer group. In contrast, Borella's edge routers only send out information about themselves. Borella's edge routers do not make information received via Borella's peer discovery protocol regarding another device available to other devices. Thus, none of Borella's edge routers can be considered a peer group name server. For example, in order to anticipate Applicant's claims, Borella's edge router 20 would have to make the address information regarding edge router 16 accessible to other entities on the network, which does not occur in Borella's system. In fact, Borella fails to mention anything about a first peer network device providing discovery information about second peer network device available to a third peer network device, as would be required if Borella were to anticipate Applicants' claim. Borella clearly fails to disclose a peer group name server receiving information about a peer group, wherein the information about the peer group stored on the peer group name server is accessible to entities on the network through the peer group name server to discover the peer group.

In his response to arguments, the Examiner again cites figures 8A-B and column 7, line 37 – column 8, line 12 of Borella. The Examiner asserts, "applicant fails to consider the teaching of Borella's reference for storing the information for peer network device in the peer discovery table for being used by the requested network device" and again refers to Borella's network device being able to discover its peer by using the peer discovery protocol. **However, the teaching of Borella on which the Examiner relies does not support the Examiner's argument.** As noted above, Borella's peer discovery protocol allows an edge router to include a peer discovery marker into a TCP message. Another edge router responds to the discovery marker with its network address and a network address of an associated host device. Thus, Borella's peer discovery protocol allows peer devices (edge routers) to exchange network addresses directly. **However, Borella's peer discovery protocol clearly does not involve information about a peer group that is stored on a peer group name server being accessible to entities on the network through the peer group name server to discover the peer group.**

Borella's edge router stores a peer's network address in a "peer discovery table" that is used by the edge router when sending messages to other edge routers. The information in a particular edge router's peer discovery table is not accessible to other entities on the network and **is clearly not accessible through a peer group name server**, as would be required were the Examiner's interpretation correct, which it clearly isn't.

Anticipation requires the presence in a single prior art reference disclosure of each and every limitation of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9

USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, Borella clearly fails to disclose wherein the information about the peer group stored on the peer group name server is accessible to entities on the network through the peer group name server to discover the peer group. Therefore, Borella cannot be said to anticipate claim 1. The rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested. Similar remarks apply to claims 11, 37, 44, 61 and 65.

Regarding claim 31, Borella fails to disclose a first peer in the peer-to-peer network accessing a peer group name server in the peer-to-peer network, wherein the peer group name server comprises information about one or more entities in the peer-to-peer network, wherein the information comprises, for each of the one or more entities, a symbolic name and an associated entity identity of the entity. As noted in Applicants' previous response, the Examiner does not provide a proper rejection of claim 31. **Instead, the Examiner merely rejects claim 31 "for the same basis" as claim 1. However, claim 1 does not recite the same limitations as claim 31. Therefore, the Examiner has failed to state a *prima facie* rejection of claim 31.**

As described above, Borella teaches that a network device, such as Borella's edge router 16 may insert a special peer discovery marker in the header of an otherwise normal network message. Another network device, such as Borella's edge router 20 retrieves the marker from the network message before sending the network message on to its destination. The information in Borella's peer discovery marker including address information identifying the network device that inserted the discovery marker in the network message. The receiving network device then opens a separate communication with the sending network device in order to send its own address information. Thus, the two network devices can communicate separately, such as to enable the two devices to "exchange and negotiate 'intelligent' edge router capabilities such as error correction, encryption, compression and other transmission parameters" (Borella, column 7, line 36-column 8, line 12 and column 10, lines 25-33). However, Borella does not teach anything regarding a peer group name server including information about entities on a peer-to-peer network, where the information includes a symbolic name for each of the entities, as recited in claim 31. Instead, Borella teaches storing only the network address of peer devices (Borella, FIG. 3B and column 6, lines 51-60).

In his response to arguments, the Examiner equates the unique number of Borella's peer discovery marker to the symbolic name of Applicants' claim and refers to the fact that "Borella pointed out that the field value is not limited as described in the patent", citing column 6, lines 34 – 50 and column 8, lines 9-12. However, the general statement that Borella's system "is not limited to using the peer discovery marker 46 as a TCP 38 option and other types of peer discovery data packets could also be used" has nothing to do with a peer group name server including information about entities on a peer-to-peer network, where the information includes a symbolic name for each of the entities, as recited in Applicants' claim. Borella clearly teaches that the unique number on which the Examiner relies is part of the peer discovery marker 46 that is added to data packets sent from an edge router desiring to discover other peers (column 7, lines 35-67). Borella does not teach anything regarding his peer discovery marker (including the unique number which the Examiner equates to a symbolic name) being information included on a peer group name server. In contrast, Borella specifically teaches that the peer discovery marker is inserted into header fields of TCP/IP packets.

Moreover, a unique number described by Borella as a 1-byte field cannot be considered a symbolic name, as the Examiner contends. The Examiner relies upon a general statement of Borella's that Borella's invention "is not limited to using the peer discovery marker 46 as a TCP 38 option and other types of peer discovery data packets could also be used." However, this does not suggest and clearly fails to anticipate the symbolic name of Applicants' claim.

Additionally, in further regard to claim 31, Borella fails to disclose the first peer sending a symbolic name of an entity to the peer group name server, the peer group name server locating a copy of the symbolic name in the information about the one or more entities to determine an entity identifier associated with the symbolic name, and the peer group name server sending the entity identifier associated with the symbolic name to the first peer. Borella's system only involves pairs of network devices, such as Borella's edge routers 16 and 20, discovering each other. Borella's system does not include a peer sending a symbolic name to a peer group name server. In fact, as noted above, Borella fails to teach the use of symbolic names in his peer discovery protocol at all, despite the Examiner's contention regarding a 1-byte unique number inserted in a TCP/IP packet. Borella does not mention anything regarding a peer group name server locating a copy of the symbolic name to determine an entity identifier associated with the symbolic name and sending the entity identifier associated with symbolic name to the first peer.

In response to the above argument, the Examiner cites figures 5, 6, 7, 8A, 8B and column 9, line 52 – column 10, line 3. The Examiner assert that Borella's data packets (modified to include a peer discovery marker) are "sent to the corresponding networks from one peer for finding peer group, and the entity identifier will be extracted and stored in a peer discovery table on each peer network device who receives the packets." The Examiner also concludes, "thus all the peer network device[s have] a copy of information for the peer group." **The Examiner's argument actually supports Applicants' position.** In Borella's system, individual edge routers exchange network address information directly, as argued by the Examiner. Thus, even in the Examiner's interpretation, Borella's system does not include a first peer sending a symbolic name of another entity to a peer group name server, the peer group name server locating a copy of the symbolic name to determine an entity identifier associated with the symbolic name, and the peer group name server sending the entity identifier to the first peer. As argued by the Examiner, peer information is exchanged directly between Borella's edge routers, not via a symbolic name lookup by a peer group name server.

As discussed above, Borella fails to disclose a first peer in the peer-to-peer network accessing a peer group name server in the peer-to-peer network, wherein the peer group name server comprises information about one or more entities in the peer-to-peer network, wherein the information comprises, for each of the one or more entities, a symbolic name and an associated entity identity of the entity. Borella also fails to disclose the first peer sending a symbolic name of an entity to the peer group name server, the peer group name server locating a copy of the symbolic name in the information about the one or more entities to determine an entity identifier associated with the symbolic name, and the peer group name server sending the entity identifier associated with the symbolic name to the first peer. Therefore, Borella cannot be said to anticipate claim 31. Anticipation requires the presence in a single prior art reference disclosure of each and every limitation of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Similar remarks also apply to claims 58 and 70.

In further regard to claims 11 and 44, Borella does not disclose discovering the peer group from the information about the peer group on the peer group name server. The Examiner does not cite any passage of Borella that describes discovering a peer group from information about the peer group on a peer group name server. As noted above, Borella does not teach where information about a peer group is stored on a peer group name server is accessible *to discover the peer group*. Additionally, Borella does not disclose *discovering a peer group* from the information *about the peer group on the peer group name server*. Instead, as noted above, Borella teaches a system in which individual pairs of peers (edge routers) discover each other (via headers inserted into network messages), but Borella does not teach discovering a peer group from the information about the peer group on the peer group name server. In order to

anticipate Applicant's claims, a peer device in Borella's system would have to use the information stored on another peer device (the marker information received in a network message) to discover a peer group. However, as noted above, Borella's edge routers do not make the information they receive in the header markers of network messages accessible to other entities.

In response to the above arguments, the Examiner asserts, "applicant fails to consider the teaching of Borella's reference for storing the information for peer network device in the peer discovery table for being used by the requested network device" and again refers to Borella's network device being able to discover its peer by using the peer discovery protocol, citing figures 8A-B and column 7, line 37 - column 8, line 12 of Borella. **However, the teaching of Borella on which the Examiner relies does not support the Examiner's argument.** Borella's peer discovery protocol allows an edge router to include a peer discovery marker into a TCP message. Another edge router responds to the discovery marker with its network address and a network address of an associated host device. Thus, Borella's peer discovery protocol allows peer devices (edge routers) to exchange network address directly. However, Borella's peer discovery protocol does not involve information about a peer group on a peer group name server from which the peer group is discovered.

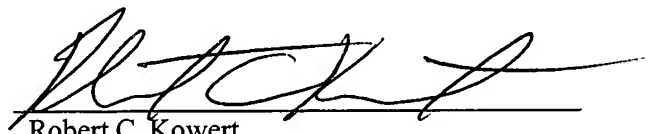
The Examiner's rejection of many of the dependent claims is additionally erroneous. For example, the cited art is clearly insufficient to support the rejection of claims 3, 5, 8, 12, 15, 16, 18, 20, 39, 42, 43, 45 and 49 as discussed in detail in Applicants' previous response on pp. 15, 18 and 20 - 21.

In light of the foregoing remarks, Applicants submit the application is in condition for allowance, and notice to that effect is respectfully requested. If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-90001/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Notice of Appeal

Respectfully submitted,



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Date: August 17, 2006